A1

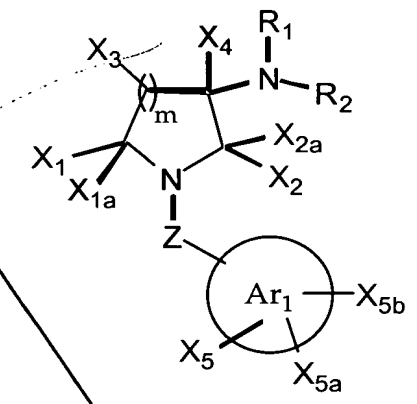
Application No. 09/090,492, filed June 3, 1998, which is, in turn, a continuation-in-part of International Application No. PCT/US97/22406, filed December 3, 1997, which, in turn, claims priority benefit of U.S. Provisional Application No. 60/033,159, filed December 13, 1996, the disclosures of all of which are incorporated herein by reference.

IN THE CLAIMS

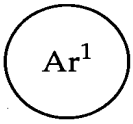
Please cancel claims 3-5, 7, 13, 15 to 21 and 42, without prejudice.

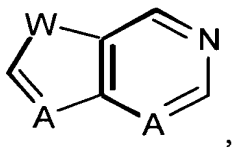
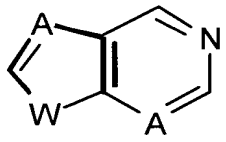
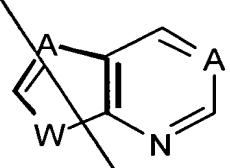
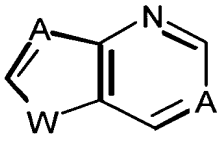
Please amend claims 1, 2, 8, 11, 12, 22, 23 and 25-29 as follows:

1. (Amended) A compound of formula I



(I)

wherein  is an optionally substituted moiety of formula

, or

selected

in which W is NR_{11}, wherein R_{11} is H, alkyl, aralkyl, heteroaralkyl or $R_8(O)CCH_2$-, and A is CH;

Z is alkylenyl, $-(CH_2)_rC(O)NR''(CH_2)_s-$, $-(CH_2)_sR''NC(O)(CH_2)_r-$ or $-(CH_2)_sNR''(CH_2)_r-$;

R_1 is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, aralkyl, substituted aralkyl, heteroaralkyl, substituted heteroaralkyl, $R'O(CH_2)_x$-, $R'O_2C(CH_2)_x$-, $R'C(O)(CH_2)_x$-, $Y^1Y^2NC(O)(CH_2)_x$- or $Y^1Y^2N(CH_2)_x$-;

R' and R" are independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aralkenyl, substituted aralkenyl, heteroaralkenyl, substituted heteroaralkenyl, aralkyl, substituted aralkyl, heteroaralkyl or substituted heteroaralkyl;

R_2 is hydrogen, aralkyl, substituted aralkyl, heteroaralkyl, substituted heteroaralkyl, aralkenyl, substituted aralkenyl, heteroaralkenyl, substituted heteroaralkenyl, $R_3R_4NC(O)(CH_2)x$-, $R_3S(O)_p$- or $R_3R_4NS(O)_p$-;

R_3 is hydrogen, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, heterocyclyl, substituted heterocyclyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aralkyl, substituted aralkyl, heteroaralkyl, substituted heteroaralkyl, aralkenyl, substituted aralkenyl, heteroaralkenyl or substituted heteroaralkenyl, or R_1 and R_3 taken together with the -N-S(O)$_p$- moiety or the -N-S(O)$_p$-NR$_4$- moiety through which R_1 and R_3 are linked form a 5 to 7 membered heterocyclyl or substituted heterocyclyl; and

R_4 is hydrogen, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aralkyl, substituted aralkyl, heteroaralkyl or substituted heteroaralkyl, or R_3 and R_4 taken together with the nitrogen to which R_3 and R_4 are attached form a 4 to 7 membered heterocyclyl or substituted heterocyclyl;

X_1 and X_{1a} are independently selected from H, alkyl, substituted alkyl, aryl, substituted aryl, aralkyl, substituted aralkyl, heteroaryl, substituted heteroaryl, heteroaralkyl, substituted heteroaralkyl, or X_1 and X_{1a} taken together form oxo;

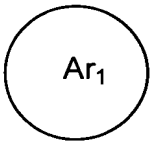
X_2 and X_{2a} taken together form oxo;

X_3 is H, hydroxy, alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl, substituted

heteroaryl, aralkyl, substituted aralkyl, heteroaralkyl or substituted heteroaralkyl, or X_3 and one of X_1 and X_{1a} taken together form a 4 to 7 membered cycloalkyl;

X_4 is H, alkyl, substituted alkyl, aralkyl or substituted aralkyl;

X_5, X_{5a} and X_{5b} are independently selected from H, R_5R_6N-, (hydroxy)HN-, (alkoxy)HN-, or (amino)HN-, R_7O-, R_5R_6NCO-, $R_5R_6NSO_2$-, R_7CO-, halo, cyano, nitro and $R_8(O)CCH_2$-, and one of X_5, X_{5a} and X_{5b} is a substituent that is alpha to a nitrogen of the ring of



that is distal to Z and is selected from the group consisting of H, hydroxy, H_2N-, (lower alkyl and substituted lower alkyl)HN-, (hydroxy)HN-, (alkoxy)HN- and (amino)HN-;

Y^1 and Y^2 are independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aralkyl, substituted aralkyl, heteroaralkyl or substituted heteroaralkyl, or Y^1 and Y^2 taken together with the N through which Y^1 and Y^2 are linked form a 4 to 7 membered heterocyclyl;

R_5 and R_6 are independently H, lower alkyl or substituted lower alkyl, or one of R_5 and R_6 is H and the other of R_5 and R_6 is $R_8(O)CCH_2$- or lower acyl;

R_7 is H, lower alkyl, substituted lower alkyl, lower acyl or $R_8(O)CCH_2$- ;

R_8 is H, optionally substituted lower alkyl, alkoxy or hydroxy;

m is 1; p and r are independently 1 or 2; s is 0, 1 or 2; and x is 1, 2, 3, 4, or 5, or

a pharmaceutically acceptable salt, N-oxide, hydrate or solvate thereof.

2. (Amended) The compound of claim 1, wherein:

Z is alkylenyl;

R_1 is hydrogen, alkyl, substituted alkyl, aralkyl, substituted aralkyl, heteroaralkyl, substituted heteroaralkyl, $R'O(CH_2)_x$-, $R'O_2C(CH_2)_x$-, $Y^1Y^2NC(O)(CH_2)_x$-, or $Y^1Y^2N(CH_2)_x$-;

R' is hydrogen, alkyl, substituted alkyl, aralkyl, substituted aralkyl, heteroaralkyl, or substituted heteroaralkyl;

R_2 is $R_3S(O)_p$- or $R_3R_4NS(O)_p$-;

R_3 is alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, heterocyclyl, substituted heterocyclyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aralkyl, substituted aralkyl, heteroaralkyl, substituted heteroaralkyl, aralkenyl, substituted aralkenyl, heteroaralkenyl or substituted heteroaralkenyl, or R_1 and R_3 taken together with the -N-$S(O)_p$- moiety or the -N-$S(O)_p$-NR_4- moiety through which R_1 and R_3 are linked form a 5 to 7 membered heterocyclyl or substituted heterocyclyl;

R_4 is alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aralkyl, substituted aralkyl, heteroaralkyl or substituted heteroaralkyl, or R_3 and R_4 taken together with the nitrogen to which R_3 and R_4 are attached form a 4 to 7 membered heterocyclyl or substituted heterocyclyl; and

Y^1 and Y^2 are independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, aralkyl, substituted aralkyl, heteroaralkyl or optionally substituted heteroaralkyl, or Y^1 and Y^2 taken together with the N through which Y^1 and Y^2 are linked form a 4 to 7 membered heterocyclyl; or

a pharmaceutically acceptable salt, N-oxide, hydrate or solvate thereof.

A3 Sub B1

8. (Amended) The compound of claim 1 wherein R_1 is H, heteroaralkyl, substituted heteroaralkyl, aralkyl, substituted aralkyl, alkyl or substituted alkyl.

11. (Amended) The compound of claim 9 wherein R_3 is phenyl, substituted phenyl, naphthyl, substituted naphthyl, thienyl, substituted thienyl, benzothienyl, substituted benzothienyl, thienyopyridyl, substituted thienyopyridyl, quinolinyl, substituted quinolinyl, isoquinolinyl or optionally substituted isoquinolinyl.

A4 Sub B1

12. (Amended) The compound of claim 1 wherein Z is methylenyl.

22. (Amended) The compound of claim 1, wherein Z is bonded to said moiety through the 5 membered ring.

A5 Sub B1

23. (Amended) The compound of claim 1 wherein one of X_5, X_{5a} and X_{5b} is a substituent that is on the Ar^1 ring proximal to Z, at a position that is alpha to where Z is attached to Ar^1 and is selected from the group consisting of H, hydroxy and amino.

25. (Amended) The compound of claim 1 wherein said one of X_5, X_{5a} and X_{5b} that substitutes the ring of Ar^1 distal to Z at the position alpha to a nitrogen thereof is H or (H, lower alkyl, substituted lower alkyl, hydroxy or amino)HN-.

A6 Sub B1

26. (Amended) A compound according to claim 1 which is selected from

1-(4-Aminoquinazolin-7-ylmethyl)-3-(S)-[(1H-pyrrolo[2,3-c]pyridin-2-ylmethyl)amino] pyrrolidin-2-one;

2-(5-Chlorothiophen-2-yl)ethenesulfonic acid [2-oxo-1-(1H-pyrrolo[3,2-c]pyridin-2-yl-methyl)pyrrol-idin-3-(R)-yl]amide;

{[2-(5-Chlorothiophen-2-yl)ethenesulfonyl]-[2-oxo-1-(1H-pyrrolo[3,2-c]pyridin-2-yl-methyl)pyrrol-idin-3-(R)-yl]amino}acetic acid isopropyl ester;

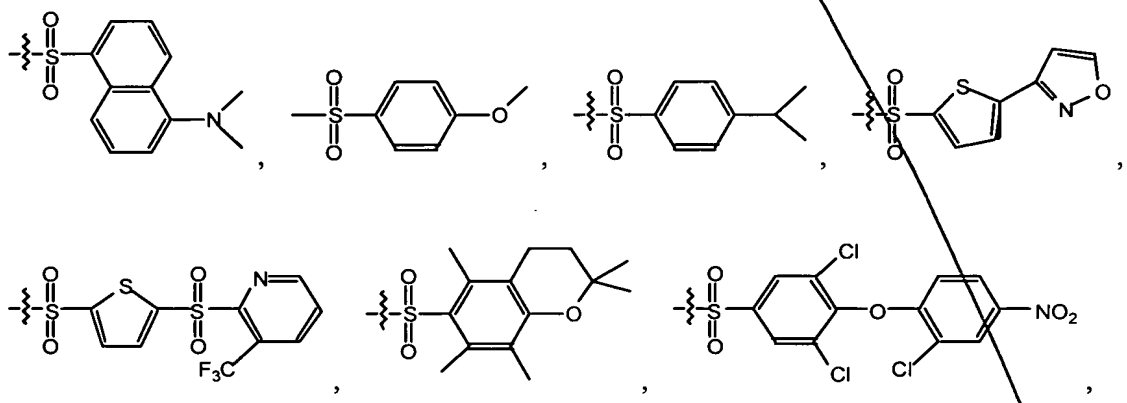
5'Chloro-[2,2']bithiophenyl-5-sulfonic acid [2-oxo-1-(1H-pyrrolo[3,2-c]pyridin-2-yl-methyl)-pyrrol-idin-3(S)-yl]-amide;

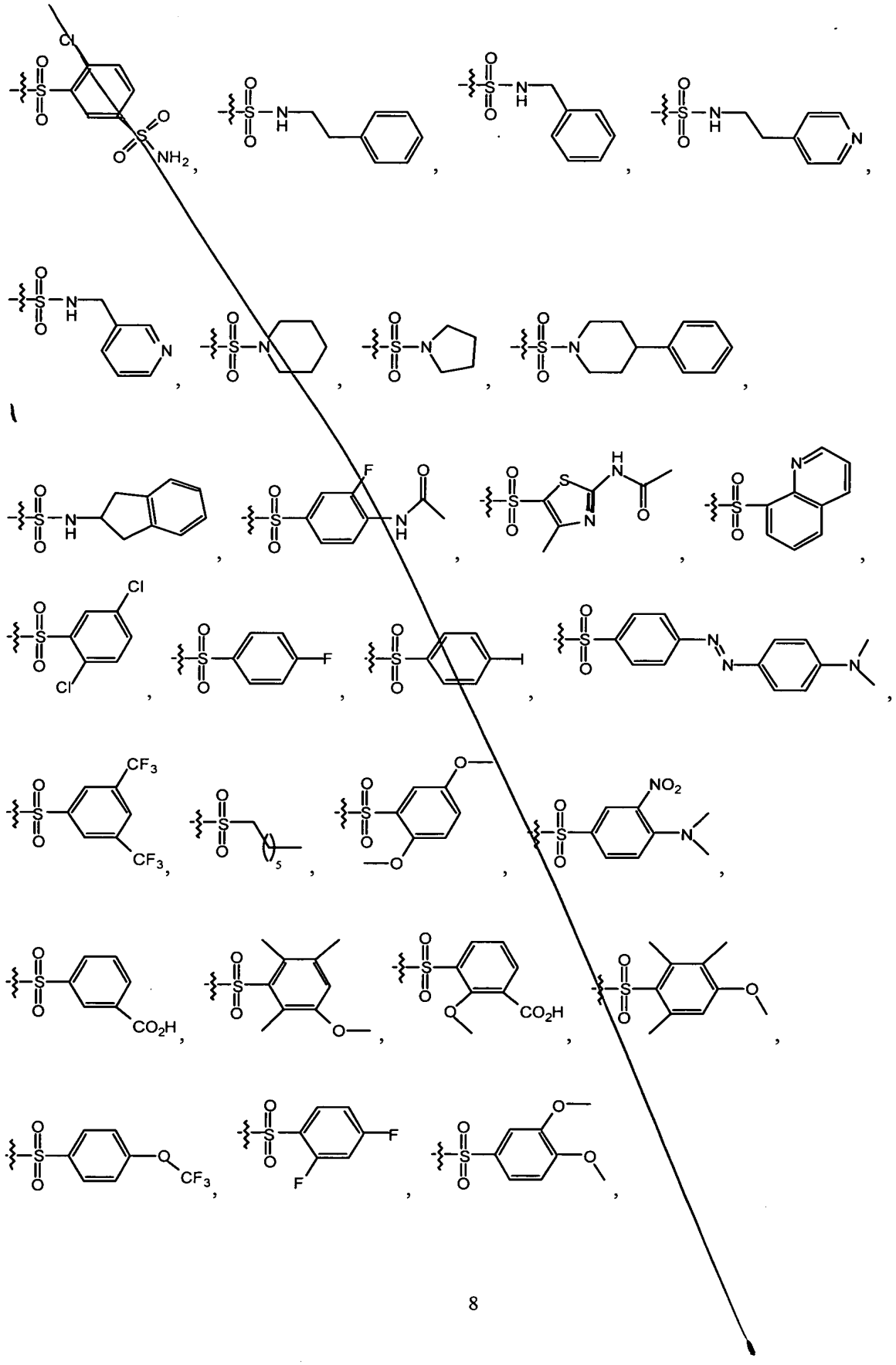
2-(5-Chloro-thiophen-2-yl)-ethenesulfonic acid [2-oxo-1-(1H-pyrrolo[3,2-c]pyridin-2-yl-methyl)-pyrrolidin-3-(S)-yl]-amide; and

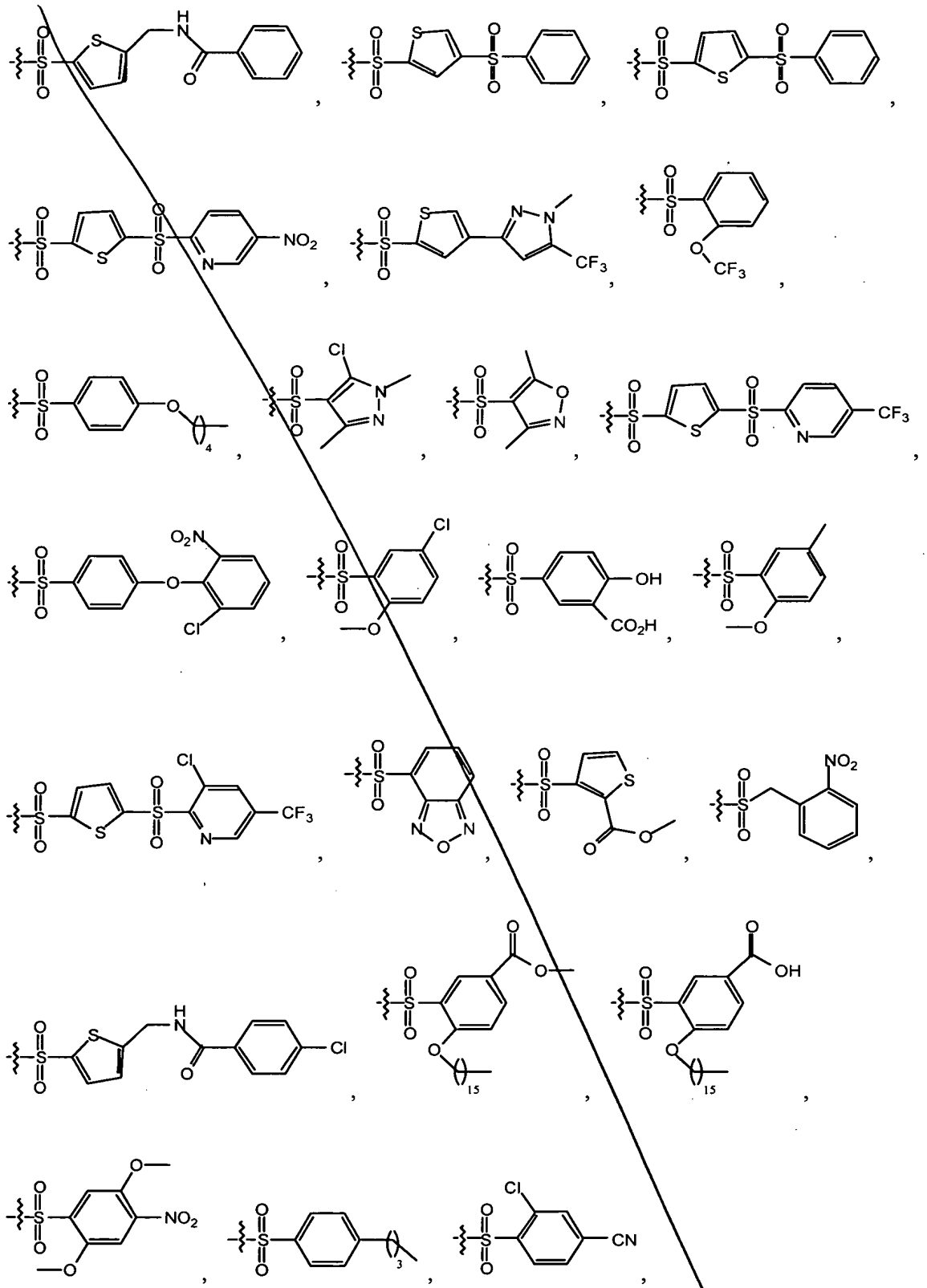
2-(5-Chloro-thiophen-2-yl)-ethenesulfonic acid [2-oxo-1-(1H-pyrrolo[3,2-c]pyridin-2-yl-methyl)-pyrrolidin-3-(S)-yl]-amide.

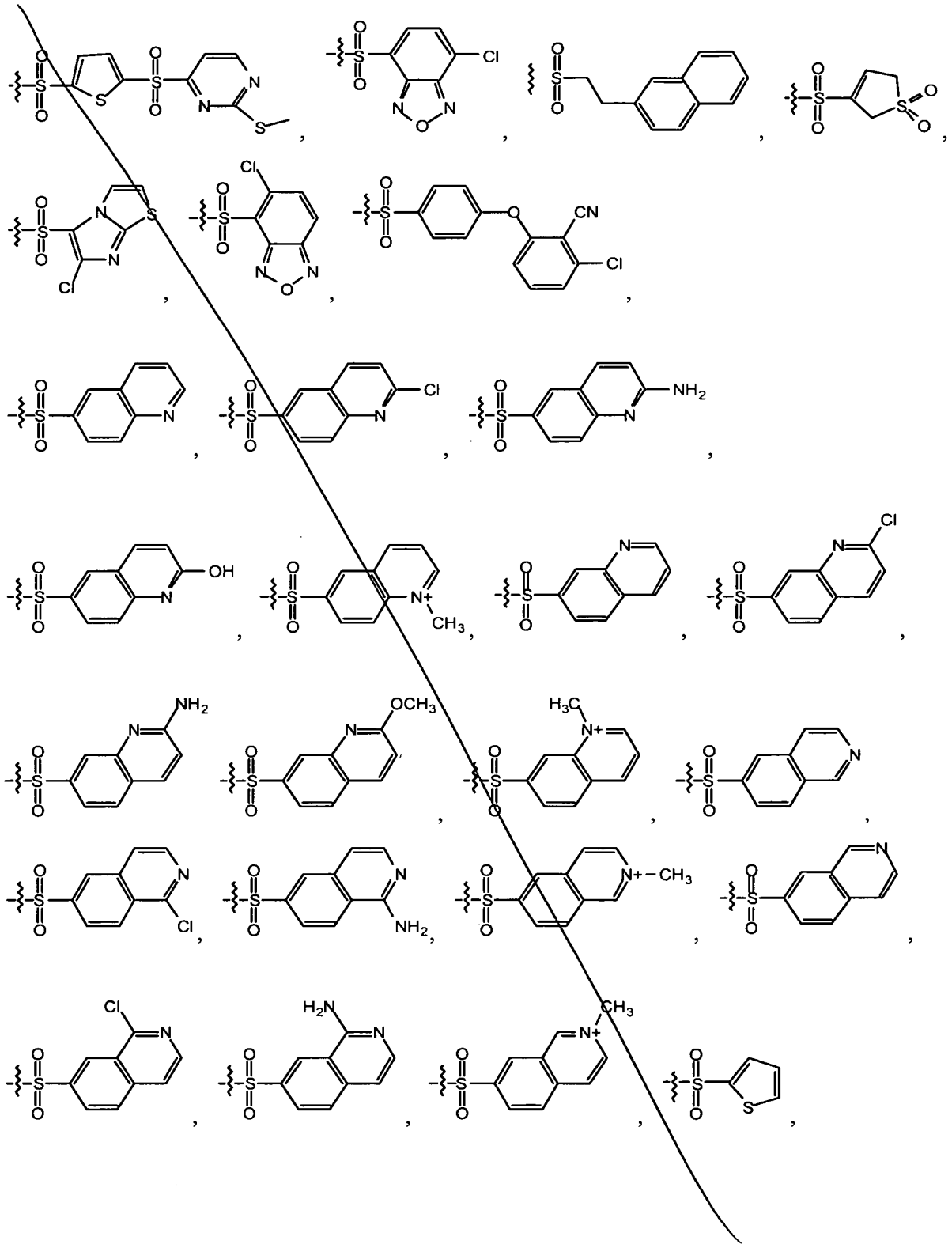
27. (Amended) A compound according to claim 1 which is selected from 2-(5-Chloro-thiophen-2-yl)-ethenesulfonic acid [2-oxo-1-(1H-pyrrolo[3,2-c]pyridin-2-yl-methyl)-pyrrolidin-3-(S)-yl]-amide and thieno[3,2-b]pyridine-2-sulfonic acid [2-oxo-1-(1H-pyrrolo[2,3-c]pyridin-2-ylmethyl)-pyrrolidin-3-(S)-yl]-amide ditrifluoroacetate.

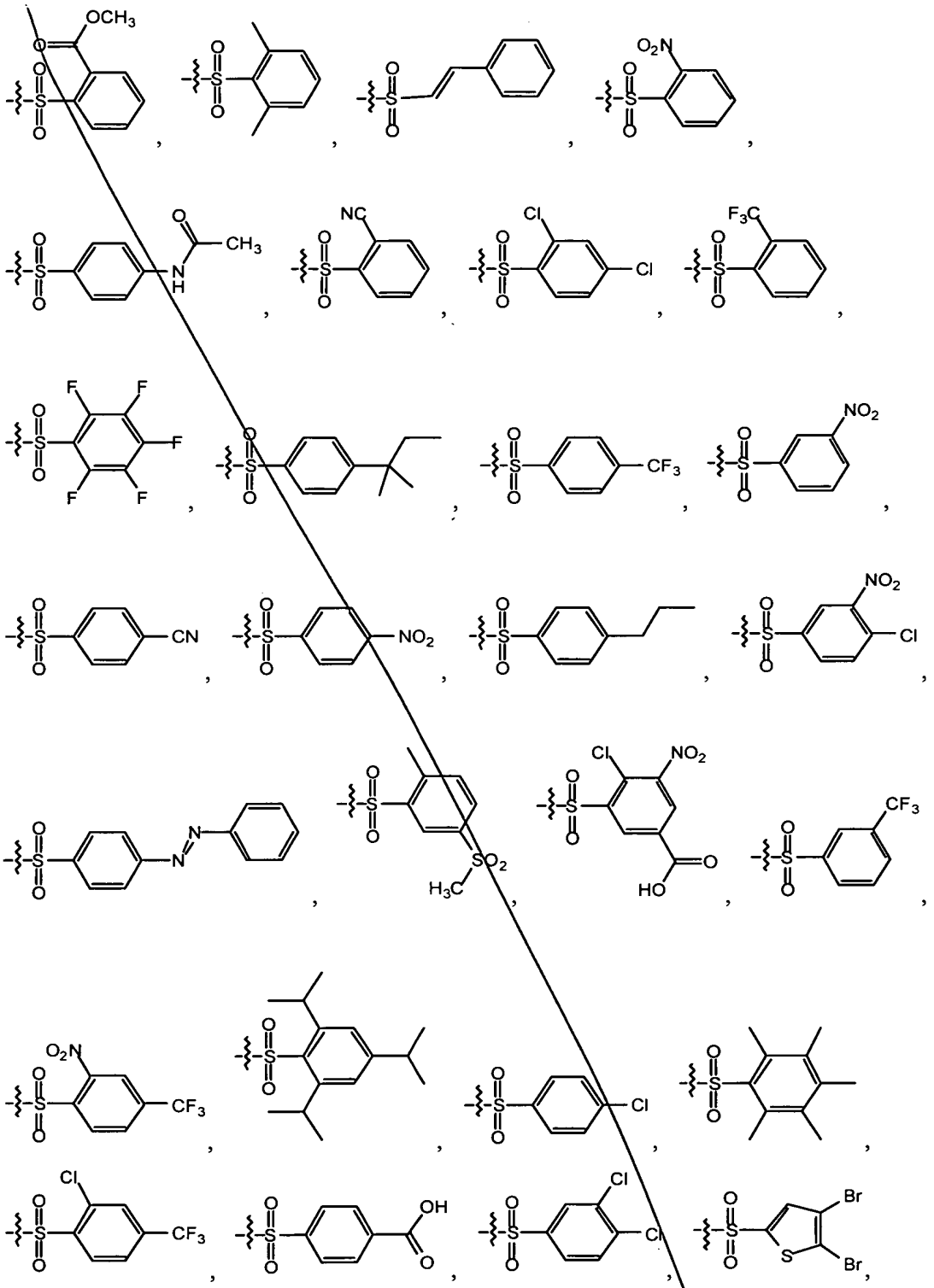
28. (Amended) A compound according to claim 1 wherein X_1, X_{1a}, X_3 and X_4 are H; and R_2 is a radical selected from the group consisting of

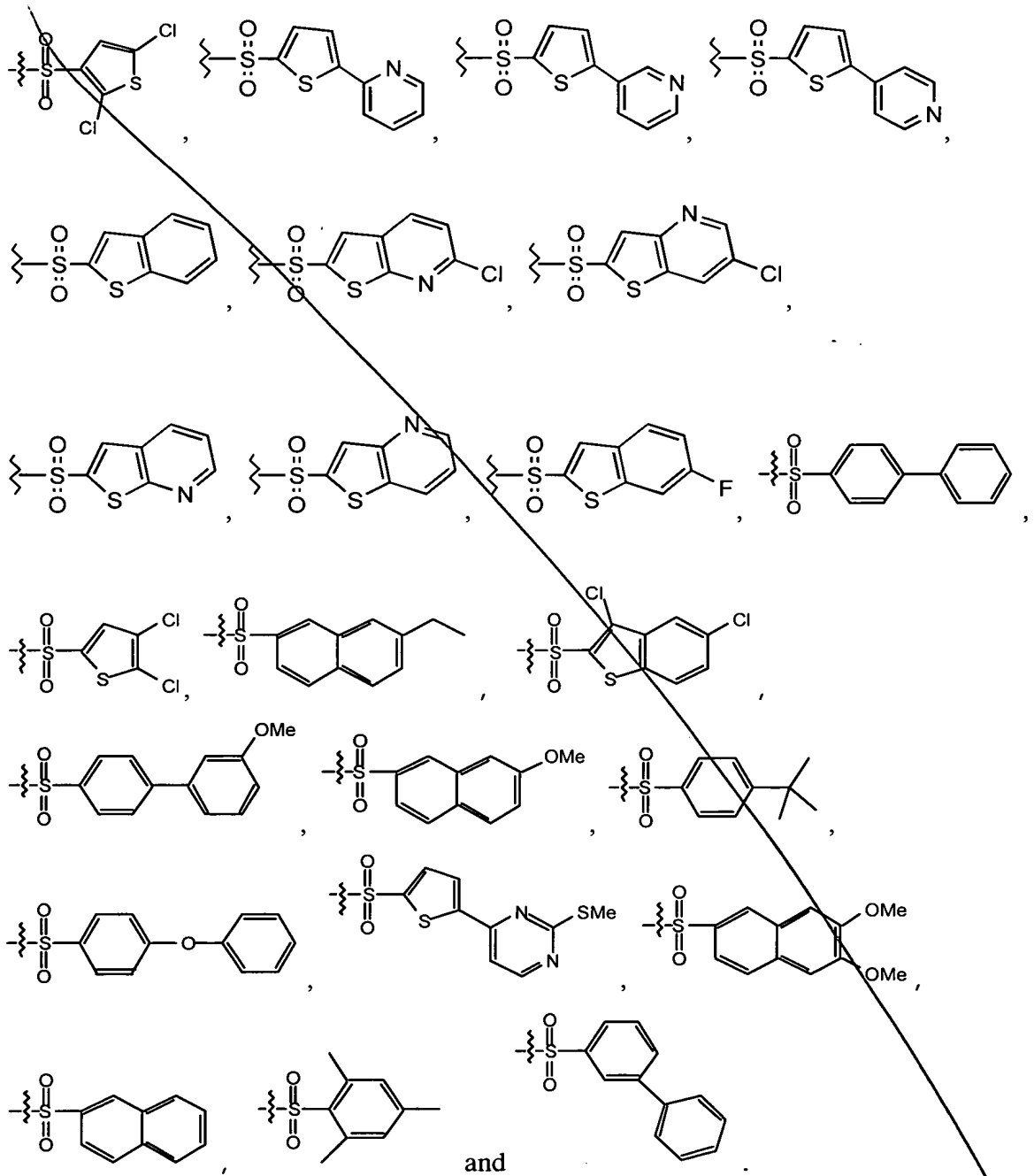




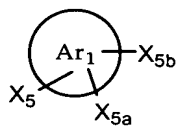
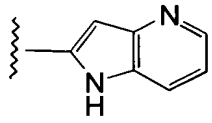








and

29. (Amended) A compound according to claim 1 wherein R_1, X_1, X_{1a}, X_3 and X_4 are H;  is selected from the group consisting of  ,